

**Opening Remarks of U.S. Representative Judy Biggert (R-IL-13th)
Chairman, Science Subcommittee on Energy**

Ending Our Addiction to Oil: Are Advanced Vehicles and Fuels the Answer?

**Committee on Science
Monday, June 5, 2006**

Good morning. I want to welcome everyone to this Energy Subcommittee hearing. Today we are going to examine how new technologies and advanced fuels for passenger vehicles could help end our nation's addiction to oil.

I want to thank my Ranking Member, Mr. Honda, for traveling here from his home in the Silicon Valley of California. I greatly appreciate the time he has taken to come visit my favorite part of Illinois. I also want to welcome my fellow member of the Illinois delegation, Dr. Lipinski, and thank him for joining us today.

I also want to thank our hosts, Mayor Pradel and the citizens of Naperville, for opening their Municipal Center to us today.

Finally, I hope you all got a chance to look at the advanced vehicles parked outside, many of which run on alternative fuels. If you didn't, not to worry; they will still be there after this hearing is over. We wouldn't be able to peek under the hood or kick the tires of these hybrid, plug-in hybrid, and flex fuel vehicles today if it weren't for the good people at General Motors, Argonne National Laboratory, the Illinois Institute of Technology, and Northern Illinois University.

Transportation is always a major issue for suburban communities, whether they are in my district, Mr. Honda's, or Mr. Lipinski's. As a matter of fact, it was better roads, inexpensive vehicles, and cheap gasoline that allowed the suburbs to flourish.

We see that transportation and oil are becoming increasingly important to the growing populations in China and India. In addition, various studies suggest that we have reached peak oil production, or will very soon, meaning the gap between supply and demand will only grow larger. This will give countries with sizeable oil reserves, many of which are hostile to the United States, and their cartels even more opportunities to manipulate the global market for oil.

The bad news is that this confluence of factors already is hitting the pocketbooks of American families, with oil over \$70 per barrel. The good news is that there is nothing like a \$3 gallon of gasoline to get everyone thinking about new and creative ways to make transportation more affordable, less polluting, and less susceptible to the vagaries of the world oil market.

More than anything else, Americans want to be able to hop into their cars and go. Very few care what makes their car go. They just want it to be inexpensive and easy to get. Our interest today is in retaining that convenience and minimizing its cost – to our national security, to our economic security, and to our environment, not to mention to the family budget – through the use of research and technology.

We need to be working towards cars that can run on whatever energy source is available at the lowest cost: be it electricity, gasoline, biofuel, hydrogen, or some combination of these. In addition, we need to find ways to make these diverse fuels readily available across the country.

Plug-in hybrids or hydrogen-powered fuel cells would allow us to run our cars using renewable sources such as solar and wind, other clean and abundant sources like nuclear and even coal – preferably from power plants employing advanced clean coal technologies that I hope will soon be the norm. Flex fuel vehicles running on renewable biofuels, such as ethanol and biodiesel made from all kinds of plant material – not just corn – can significantly decrease greenhouse gas emissions. And as demand for biofuels increases, we can simply grow more of the feedstock, whether that's corn, sugarcane, or switchgrass. And the benefit of these advanced vehicle technologies and alternative fuels will reduce our dependence upon imported sources of oil.

It is clear that both technical and market obstacles remain to realizing the potential benefits of all of the advanced vehicle technologies or alternative fuels we will be discussing. What are the technical or cost-competitiveness issues with important components, such as batteries fuel cells or power electronics? What major hurdles stand in the way of the production or distribution of advanced biofuels? What technical challenges have not received sufficient attention?

Or are the hurdles non-technical? Do consumer preferences or auto industry inertia present the highest hurdles? What about infrastructure costs?

I want to give the City of Naperville credit for focusing on this market or demand side of the equation. As a founding member of the Plug-In Partner Campaign, Naperville is one of 132 public power utilities and 43 cities, counties, and local governments that have made “soft” purchase orders indicating a strong interest in buying flexible fuel plug-in hybrid vehicles – if they are manufactured. In one of these vehicles, the average American, who drives between 25 and 30 miles a day, could complete his or her commute and run some errands without burning drop of gasoline. That's good for energy security, not to mention the pocketbook.

As I see it, one of the most significant potential benefits of the plug-in hybrid is that they do not require a whole new “refueling” infrastructure. To think that you could pull into your garage at the end of the day and “fill ‘er up” just by plugging your car into a regular, 120-volt socket in the garage is very appealing. Imagine the convenience of recharging your car just as you recharge your cell phone, blackberry, or laptop every evening – by simply plugging it in. The next morning, unplug it and you are ready to go.

The City of Naperville realized that the best way to hasten the arrival of plug-in hybrids was to commit to buying one. You can do the same thing. Simply go to www.pluginpartners.com, click on the “What You Can Do” tab, and fill in the Plug-In Partners petition. Let the automakers know that you'd be willing to pay a few thousand more dollars to buy a vehicle that would be cheaper to operate, cleaner, and could run on domestically produced electricity.

We are looking to you, our witnesses here today, to help us identify the most significant technical and market obstacles facing the widespread availability of advanced vehicle technologies and alternative fuels that will make our cars less dependent upon imported oil. In addition, we need your help determining what steps the federal government can take to remove those barriers, whether it's through focused research or tax incentives. Your input at this hearing is greatly appreciated and we look forward to your expert advice, but first I would like to recognize the ranking member, Mr. Honda, for his opening statement. Mr. Honda.